

ECONOMICS WORKING PAPER

SME Policies and Performance in Malaysia

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Abstract

This study aims to achieve two major objectives. First, to assess policies and initiatives implemented for the development of small and medium-sized enterprises (SMEs) in Malaysia from the Eighth Malaysia Plan (2001-2005) to the Eleventh Malaysia Plan (2016-2020) as well as the SME Masterplan (2012-2020). Second, to analyze the performances and contributions of SMEs in Malaysia. The study provides a critical analysis of the adequacy of the Eleventh Malaysia Plan for SME development including whether the targeted goals for SMEs towards 2020 can be achieved. A key highlight of the analysis is the redefinition of SMEs which has greatly affected several indicators that are relevant to the measurement of the achievement of targeted goals. The study utilizes content analysis and the notion of embeddedness to examine the contents of published government reports on the topic of SMEs development and their way forward.

Keywords: Small and Medium-Sized Enterprises; Malaysia

JEL Classification: L52; L60

SME Policies and Performance in Malaysia

Yee-Whah Chin and Ee-Shiang Lim

1. Introduction

Small and medium-sized enterprises (SMEs) have played an increasingly important role in Malaysia since the late 1990s. SMEs were more resilient during the 1998-99 Asian Financial Crisis compared to large enterprises. One significant milestone which marked the importance of SMEs to the Malaysian economy was the establishment of a National SME Development Council (NSDC) in 2004. As of 2015, SMEs' importance in the Malaysian economy can be measured in terms of their share of total number of establishments (97.3 per cent) and share of total employment (59 per cent). In contrast, their share in GDP (35.9 per cent) and in total exports (19 per cent) remain small (Malaysia 2015).

This study aims to achieve two major objectives. First, it presents an assessment of the policies and initiatives implemented for the development of Malaysian SMEs. The study provides a description and analysis of key policies for SMEs development over time from the Eight Malaysia Plan (8MP) to the current Eleventh Malaysia Plan (11MP), and also the SME Masterplan (2012-2020). Second, integral to these key policies and initiatives, the study provides an in-depth analysis of the performances and contributions of SMEs in Malaysia. By examining previous key policies for SME development and past performances, this study provides a critical analysis of the adequacy of the 11MP for SME development in view of the targeted goals in 2020. A key highlight of the analysis is the redefinition of SMEs which has greatly affected several macroeconomic indicators that are relevant to the measurement of the targeted goals.

To achieve the objectives of this study, the authors utilize content analysis and the notion of embeddedness to examine enormous volume of fragmented text with contents that are hard to document or observe casually, as contended by Neuman (2011). The use of content analysis is well justified given that there is already an existing body of government published reports available on the topic of SMEs development and their way forward. In addition, materials from previous presentations, workshops, seminars and conference proceedings also formed the key elements analyzed in this paper. On the other hand, the notion of embeddedness helps us to analyze the development policies for SMEs in a larger context of Malaysia's affirmative economic policy.

2. Definition of SMEs in Malaysia

Prior to 2005, there was no standard definition of SMEs adopted in Malaysia. In the absence of standard definition, earlier researchers have adopted their own definitions. Some defined SMEs based on quantitative indicators such as number of employees and fixed capital. For example, SMEs are establishments employing less than 200 employees and having fixed assets less than RM2.5 million (Chee 1986; Moha Asri 2002). On the other hand, Mohd Khairuddin Hashim and Mat Saad Abdullah (2000) have proposed and adopted qualitative indicators such as owner managed, the style of management, the reliance of internal sources of capital, and the locality of its area of operation, to define SMEs.

Table 1: SME Definition in Terms of Annual Sales Turnover and Full-Time Employees, Malaysia

Size	Primary Agriculture	Manufacturing (including Agro-based and Manufacturing-related services)	Services sector (including information communications technology (ICT))
a) Annual Sales Turnover			
Micro	Less than RM200,000	Less than RM250,000	Less than RM200,000
Small	Between RM200,000 and less than RM1 million	Between RM250,000 and less than RM10 million	Between RM200,000 and less than RM1 million
Medium	Between RM1 million and RM5 million	Between RM10 million and RM25 million	Between RM1 million and RM5 million
SME	Not exceeding RM5 million	Not exceeding RM25 million	Not exceeding RM5 million
b) Full-Time Employees			
Micro	Less than 5 employees	Less than 5 employees	Less than 5 employees
Small	Between 5 and 19 employees	Between 5 and 50 employees	Between 5 and 19 employees
Medium	Between 20 and 50 employees	Between 51 and 150 employees	Between 20 and 50 employees
SME	Not exceeding 50 employees	Not exceeding 150 employees	Not exceeding 50 employees

Source: SME Annual Report 2011/12, National SME Development Council.

In 2005, the NSDC endorsed the use of a standard definition of SMEs in three key sectors, namely, manufacturing & manufacturing related services, primary agriculture, and services sector (Malaysia 2013). In general, the size of establishment was defined based on two criteria: annual sales turnover and the number of full-time employees. Different definitions was adopted for the manufacturing sector on one hand, and primary agriculture and services sectors on the other hand, as displayed in Table 1. In the agriculture and services sector, an enterprise was classified as SME if the annual sales turnover does not exceed RM 5 million or employs less than fifty employees. In the manufacturing sector, an enterprise was classified as a SME if the annual sales turnover does not exceed RM 25 million or employs less than 150 employees. The establishment was further classified into micro-sized enterprise, small-sized enterprise, and medium-sized enterprise, based on their annual sales turnover or the number of full-time employees (Table 1).

In 2014, the definition of SME was revised. According to a circular on new definition of SME by Bank Negara Malaysia (on 6 November 2013), the introduction of new definition of SME was necessary following the economic changes such as price inflation, structural shifts, changes in business trends, that have taken place since 2005 (Malaysia, 2013). As indicated in the SME Annual Report 2013/2014, it is important to establish an appropriate definition in order to identify the target group for assistance. When undertaking the review exercise, the government utilized various guiding principles which include criteria to reflect current economic situation such as price inflation, changing trends such as employment of part-time workers, structural changes, simplicity in terms of understanding and implementation, comprehensiveness of the definition in terms of coverage, and the relevant of definition till 2020. The government conducted comprehensive review based on technical analysis, global benchmarking, and focus group discussion during the review (*SME Annual Report 2013/2014*).

A new definition of SME was adopted for two sectors: manufacturing, and services and other sectors, instead of three sectors as mentioned in the previous definition. The new definition of SME has increased the qualifying threshold for two criteria: sales turnover and employment for sectors and size of operation. According to this new definition, an establishment is classified as a SME if sales turnover is less than RM50 million (previously RM 25 million) or employs less than 200 (previously 150) full time employees, in the manufacturing sector, or sales turnover is less than RM20 (previously RM5 million) million or employs less than 75 (previously 50) full time employees, in the services and other sectors.

The detailed new and old definitions for small-sized and medium-sized enterprises are provided in Table 2. An establishment is considered a SME if it meets the requirement of either

one of the two specified criteria, whichever is lower (Malaysia 2013). This definition will be used to define the scope of SME for statistical purposes and as the eligible criteria for government assistance (Malaysia 2013). This revised definition of SME, however, excludes the following:

- a) a company that is public-listed in main board in Malaysia or other countries; or/and
- b) a subsidiary of public listed company in main board in Malaysia or other countries, or/and
- c) a subsidiary of large firms, multinational corporations, government-linked companies, ministry of finance incorporated companies, and state-owned enterprises

Table 2: New Definition of SMEs in Terms of Annual Sales Turnover and Full-Time Employees, Malaysia (2014)

Category	Micro	Small	Medium
Manufacturing	Sales turnover of less than RM300,000 (RM200,000-250,000)	Sales turnover from RM300,000 (<i>RM 250,000</i>) to less than RM15 (<i>RM10</i>) million OR Employees from 5 to less than 75 (<i>50</i>)	Sales turnover from RM 15 (<i>RM10</i>) million to not exceeding RM 50 (<i>RM25</i>) million OR Employees from 75 (<i>51</i>) to not exceeding 200 (<i>150</i>)
Services and other sectors	OR Employees less than 5	Sales turnover from RM 300,000 (<i>RM 200,000</i>) to less than RM 3 (<i>RM1</i>) million OR Employees from 5 to less than 30 (<i>19</i>)	Sales turnover from RM 3 (<i>RM1</i>) million to not exceeding RM20 (<i>RM5</i>) million OR Employees from 30 (<i>20</i>) to not exceeding 75 (<i>50</i>)

Source: National SME Development Council (Malaysia 2013).

Note: Figures in *italic* refer to old definition of SMEs.

3. Key Policies on SMEs Development

The Malaysian government has changed the nation's economic development strategies over time in response to the changing global economy as well as the domestic economy. Strategies for developing SMEs not only shaped the development of SMEs but also the society at large (Chin 2012) which is politically embedded. Malaysia has given priority to the development of SMEs which is evident in the Second Industrial Master Plan 1996-2005 (IMP2), the Third

Industrial Master Plan 2006-2020 (IMP3) and in particular the SME Masterplan (2012-2020). The IMP2 addressed several issues that include access to markets; increasing technology capabilities; enhancing the adoption of ICT; and increasing access to finance (MITI 1996). During the Eight Malaysia Plan 2001-2005 (8MP), the government undertook strong support in the development of resilient SMEs, especially in sectors with high growth and export potential. Considerable attention was given to the provision of industrial infrastructure and amenities (such as SME industrial parks, comprising factory units and incubator facilities) to facilitate the expansion of SME activities at key locations throughout the country (Malaysia 2001). An important milestone for the development of Malaysian SMEs was the establishment of NSDC in 2004 with the purpose to ensure that SME development plans are focused.

The Ninth Malaysia Plan 2006-2010 (9MP), which coincided with the IMP3, addressed the more challenging and competitive global environment for Malaysian SMEs. Focus was given to upscale the manufacturing sector towards higher value added activities and upgrade capacity in the provision of related services. The plan also focused on transforming industrial businesses and complementary services of SMEs into strong knowledge-intensive and value-creating entities. Strategies adopted to achieve these were the acquisition of technologies to push SMEs up the value chain in the manufacturing, agriculture and services sectors. It emphasized technology development capabilities to achieve product and services differentiation as well as to create a greater number of local technology-based companies. Efforts were given to speed up domestic technology development capabilities of SMEs by nurturing local SMEs as R&D partners to tap the opportunities of R&D outsourcing by transnational companies (TNCs) and government-linked companies (GLCs). The triple helix concept was implemented to encourage collaborative ventures and research involving enterprises (TNCs, GLCs and SMEs); universities and research institutions; and state agencies to facilitate R&D, technology transfer and skills development as well as marketing (Malaysia 2006). Networking and Knowledge Transfer to SMEs through university–industry engagement and facilitated by government initiatives was implemented at Universiti Sains Malaysia (USM) (Chin and Lim 2012). A newly established non-profit knowledge institute designated Collaborative Research in Engineering, Science and Technology (CREST) located within the USM area is engaging in advance research to invigorate Malaysia’s EE industry.

Since 2004, greater emphasis was given to SMEs. Further recognition for SMEs as the backbone of the Malaysian economy is evident in the new initiatives stated in the New Economic Model (NEM) which was launched in early 2010. The government recognized that the growth of large firms and global giants need clusters and critical masses of SMEs.

Moreover, SMEs were (are) still the most important employment providers and sources of talent for large firms. To support growth, creativity and competitiveness of SMEs in the context of liberalization and deregulation of the Malaysian economy, the government developed new mechanisms to provide financial and technical support for SMEs in innovative and technologically advance areas. Special focus was given to support rapid transformation of SMEs with potential for innovation (Malaysia 2010). A masterplan for the development of SMEs was announced by the Prime Minister on 12 February 2010 to ensure their growth was synchronized with the NEM.

The SME Masterplan aimed to help SMEs grow beyond domestic market and emphasizes innovations and new technology as the strategies for growth and development of SMEs. There were fifteen government ministries and more than sixty agencies involved in supporting the development of SMEs. Also, there were more than 500 government programmes implemented from 2006 to 2010 to help the SMEs. A major allocation of the resources (85 per cent) was given to programmes related to financing. However, in terms of number of programmes, the largest share (70 per cent) was mainly for capacity building (Malaysia 2012a).

The Tenth Malaysia Plan 2011-2015 (10MP) gave different emphasis for SME development compared to the 8MP and 9MP. SME Development Programmes implemented under the 9MP focused on three strategic thrusts: Strengthening Enabling Infrastructure; Building Capacity and Capability; and Enhancing Access to Financing. Policies for SMEs development in the 10MP were in line with the government's liberalization and deregulation of the Malaysian economy as stated in the SMEs Masterplan. Focus was given to create domestic, regional and global champions. To achieve these, initiatives were made to reduce the regulatory costs borne by SMEs; building capacity and capability of SMEs; supporting the creation of an entrepreneurial culture; strengthening support System for SMEs; and access to financing for SMEs (Malaysia 2010).

SME Development Programmes implemented under the 10MP were more comprehensive with five focus areas: human capital development; market access; access to financing; innovation and infrastructure. Overall, there were about 800 development programmes implemented over the period 2011-2015, which is much higher than the 500 development programmes implemented under the 9MP. However, the number of programmes, financial expenditure and beneficiaries for SMEs on human capital development over the period 2011-2015 were on the decline – this was not consistent with the initiatives for building SME capacity and capability (Tables 3a, 3b and 3c). This trend of human capital development

for SMEs remains a challenge for Malaysia to achieve a high-income status which will depend on highly skilled and creative workforce.

Table 3a: Number of SME Development Programmes under the 10th Malaysia Plan (2011-2015) by Focus Areas and by Year

Focus Area	No. of Programmes				
	2011	2012	2013	2014	2015
Human Capital Development	61	30	30	35	39
Market Access	31	29	28	33	37
Innovation	34	29	24	28	22
Infrastructure	12	10	14	13	16
Access to Financing	45	41	47	30	36
Total	183	139	143	139*	150**

Source: SME Annual Report 2011, 2012, 2013, 2014, 2015.

Note: *Exclude twenty-three programmes implemented in collaboration with the private sector, amounting to RM4.83 billion which benefitted more than 65,000 SMEs. ** Exclude twenty programmes implemented in collaboration with the private sector, amounting to RM3.1 billion which benefitted some 12,900 SMEs.

Given Malaysia's relatively small domestic market, one of the 10MP SME initiative was to create more regional and global champions. There was an average of thirty-two programmes (promotional and development initiatives; and to improve operational and production standards) implemented between 2011 and 2015 to help SMEs to become more competitive in the international arena. It is not mentioned in SME annual reports why the total SME beneficiaries for market access decreased from 225,192 in 2011 to 14,553 in 2015 despite the increased in financial expenditure (Tables 3a, 3b and 3c). From the qualitative data, the "Product and Quality Enhancement (GroomBig) Programme" and Vendor Development Programme (VDP) could involved mainly fewer medium size firms with higher allocation for each firm.

Table 3b: Financial Expenditure for SME Development Programmes under the 10th Malaysia Plan (2011-2015) by Focus Areas and by Year

Focus Area	Financial Expenditure (RM mil.)				
	2011	2012	2013	2014	2015
Human Capital Development	162.8	34.4	44.1	73.9	79.4
Market Access	36.6	91.3	91.6	79.5	99.0
Innovation	112.3	112.4	227.9	224.4	258.1
Infrastructure	110.8	90.6	85.6	132.9	194.4
Access to Financing	4,254.36	6,731.9	8,678.0	4,591.4	4,393.8
Total	4,677.1	7,060.6	9,127.2	5,102.1*	5,024.7*

Source: SME Annual Report 2011, 2012, 2013, 2014, 2015.

*See note in Table 3a.

Innovation is always a great challenge to SMEs because it involves high investment. Over the 10MP period, the number of programmes for innovation declined from thirty-four (2011) to twenty-two (2015). However, financial expenses on innovation and total beneficiaries increased over the period. The achievements on SME innovation during the 10MP were the establishments of specialized agencies such as Agensi Inovasi Malaysia (AIM), Yayasan Inovasi Malaysia (YIM) and National Science and Research Council to drive innovation programmes and to enhance collaboration and provide advisory services to researchers and SMEs (*SME Annual Report 2015/2016*).

Infrastructure is important to create a conducive environment that support the growth of SMEs and entrepreneurs. From 2011 to 2015, more than RM600 million was spent on building business premises, incubator development, industrial estates development and equipments purchases that benefitted about 7,000 SMEs.

Financial institutions (96 per cent in 2015) have been the main pillar supporting the growth of SMEs. Non-banking financing such as venture capital, angel investors, crowdfunding, Peer-to-Peer, microfinancing, government funds etc. offer a wide range and diversified financing landscape for Malaysian SMEs (*SME Annual Report 2015/2016*). Over the 2011-2015 period, the government had spent more than RM30 billion to enhance access to financing for SMEs through a total of more than 200 programmes (Tables 3a and 3b). Total beneficiaries that received access to financing each year from 2011-2015 was more than half of the total establishments of SMEs and most beneficiaries involving micro enterprises (Table 3c. Also see Table 10). The 10MP had a dimension of inclusion, to help the B40 household.

Mean monthly household income of this group increased from RM1,440 in 2009 to RM2,537 in 2014 (*SME Annual Report 2015/2016*).

Table 3c: Number of Beneficiaries from SME Development Programmes under the 10th Malaysia Plan (2011-2015) by Focus Areas and by Year

Focus Area	Beneficiaries				
	2011	2012	2013	2014	2015
Human Capital Development	127,594	42,725	46,871	65,120	97,095
Market Access	225,192	28,115	102,708	31,118	14,553
Innovation	3,036	2,402	4,379	9,185	11,819
Infrastructure	258	3,932	919	1,255	306
Access to Financing	325,183	355,835	676,344	397,026	456,328
Total	681,263	433,009	831,221	503,704*	580,101*

Source: SME Annual Report 2011, 2012, 2013, 2014, 2015.

* See note in Table 3a.

It is commendable to have SME policy that is inclusive of the B40. Nonetheless, from the notion of political embeddedness, we question the efficiency of the allocation of resources. We view that the allocation of resources is not immune to politics as state leaders wanted to increase political power. Throughout the 10MP, the government had allocated loan of more than RM9 billion to strengthen 414,000 *Bumiputera* enterprises. Out of this amount, a total loan of RM8.6 billion was disbursed to 413,278 micro and small businesses. Only RM400 million was allocated to 722 *Bumiputera*-owned medium-size companies (Malaysia, 2015). Was the allocation of loan to the respective companies achieved the desired SME performance? Analysis by firm size and economic sectors in the next section indicates that firm structure in services, manufacturing and construction sectors contribute differently in terms of gross output and value added. There are many government loan schemes specifically made available to assist *Bumiputera* SMEs such as TEKUN¹, Skim Pembiayaan Mudah Jaya (SPiM)², New

¹ To provide microfinance facility for working capital requirements to assist the small *Bumiputera* entrepreneurs in their existing new start-up business and project implementation.

² By Majlis Amanah Rakyat (MARA) under the purview of the Ministry of Rural and Regional Development (MRRD) offers loans to *Bumiputera* entrepreneurs.

Entrepreneur Fund (NEF)³ and many more. Does the special *Bumiputera* agenda enhance the overall performance of Malaysian SMEs?

As of 2010, *Bumiputera* SMEs contributed 13 per cent of the 30 per cent total SME contribution to national GDP. The Bumiputera Economic Transformation Programs (BETP) aims to increase *Bumiputera* SMEs' GDP contribution to 20 per cent by 2020, a goal integral to the SME Masterplan (2012-2010). To achieve the 20 per cent target for *Bumiputera* SMEs, TERAJU (*Unit Pengeraju Agenda Bumiputera*) - a unit under the Prime Minister's Department was tasked to lead - coordinates and drives *Bumiputera* participation through initiatives under BETP. TERAJU launched a programme called TERAS which aims to increase *Bumiputera* SMEs that will scale up these enterprises, accelerate their growth and enable them to compete in the liberalized economy without over dependence on the government. TERAS will also identify High Performing *Bumiputera* SMEs (HPBS) and develop them as quality enterprises that will have multiplying effects on other *Bumiputera* SMEs. The TERAS programme will target to identify top 100 medium and 1,000 small and micro *Bumiputera* SMEs that have high growth potential (PEMANDU, 2012). Nonetheless, this target doesn't match the proportion of *Bumiputera* medium, small and micro enterprises. It indicates that it is not easy to find suitable or qualified medium-size enterprise to take part in the TERAS programme. As of 2015, there were 991 *Bumiputera* SMEs in the TERAS programme (PEMANDU 2016). In terms of quantity, the TERAS targets were almost achieved within only five years (2011-2015) with at least seventy-six HBPS venturing overseas. Over the same period, TERAJU had created a total of RM63.40 billion worth of investments, business and financing opportunities, and human capital development. Out this amount, RM36.06 billion or 58.9 per cent was the Carve Out and Compete initiative for *Bumiputera* Programme from GLCs and government's mega projects. These indicate that the HPBS in the TERAS programme are highly depending on government contracts and concessions and constraint their ability to venture abroad (Table 4).

The 10 MP was critical to "laying the foundation" for a major structural transformation of the Malaysian economy and society towards achieving a high income nation status by 2020. The SME Masterplan implemented in 2012 has identified SMEs as the new engine of future growth. The Masterplan served as the basis for SME development in the Eleventh Malaysia Plan 2016-2020 (11MP). Policies and initiatives to achieve the targeted growth and contribution of SMEs to the Malaysian economy by 2020 have become more focussed and

³ A government-aided fund to stimulate the growth of small and medium-sized Bumiputra enterprises and encourage business ventures with established corporations.

ambitious as drafted in the 11MP. Evidence of the continuity to create regional and global champions in the 10 MP are found in the 11MP but with specific focus to provide supports to internationalize targeted exporters, and leveraging the ASEAN Economic Community (AEC) and free trade agreements (FTAs) as well as encouraging smart partnerships between SMEs and MNCs to venture into frontier products and gain access to export markets (Malaysia 2015). One new aspect which was never the focus in any of the previous three plans is the construction sector. Capability building and size of firms are two major areas identified for development, encouraging high performing SMEs to forge partnerships with larger corporations to bid for international projects (Malaysia 2015).

Table 4: Achievements of TERAJU, 2011-2015

Year	Companies in the TERAS Programme (accumulative)	TERAS companies venturing overseas (accumulative)	New potential Bumiputera Corporate Champions (BCCs) implementing vendor programmes	Worth of business and financing opportunities (RM bil.) (accumulative)
2011	30	n.a.	n.a.	n.a.
2012	300	37	n.a.	n.a.
2013	231	50	10	17.20
2014	417	76	25	47.07
2015	991	n.a.	n.a.	63.40

Source: PEMANDU 2011, 2012, 2013, 2014 and 2015.

To understand the development policies for SMEs in Malaysia, one has to understand the spirit of affirmative policy, the wealth redistribution policy remains as clearly stated in the concluding part of the NEM to continue the expansion of the Bumiputera Commercial and Industrial Community (BCIC)⁴. Under the 10MP and 11MP, the aim was to expand the BCIC to the regions through forming synergy with the enlarging GLCs and *Bumiputera* champions. The BCIC agenda is integral to the whole of Malaysia's economic transformation programme by integrating Malaysia into the global supply chain to create large scale of networks (Malaysia, 2010a). SMEs in the construction sector is one new focus that had evolved to an

⁴ In the 11th Malaysia Plan, the use of Bumiputera Commercial and Industrial Community (BCIC) has been replaced with Bumiputera Economic Community (BEC).

important level to venture abroad. It clearly indicates *Bumiputera* interest which is exemplified in at least three merger and acquisitions of large and medium-size developers by state-backed investment institutions and GLCs in year 2010 and 2011 (See Chin 2015). Through these merger and acquisitions, *Bumiputera* SMEs in the construction sector are able to tap into existing regional and international supply chains.

While the development policies for SMEs in the 11MP emphasizes the *Bumiputera* agenda, the SME Masterplan gives much more detail analysis of SMEs by providing an impact assessment of SME Development Programmes, develops a new SME development framework, identified forces that drive SME performance, and suggests action plans to accelerate growth for SMEs.

The identified six forces that drive SME performance according to the level of importance in the SME Masterplan are (1) innovation and technology adoption; (2) human capital development; (3) access to financing; (4) market access; (5) legal and regulation environment; and (6) infrastructure (Malaysia 2012a). Such forces have in fact been identified in previous studies as common constraints that SMEs in East Asian countries faced (Harvie and Lee 2002). SMEs in Malaysia have limited access to finance despite huge allocation from the government through various sources of financing. In fact, most SMEs financed their activities with internal resources (from saving, family, friends and relatives). Common reasons given were difficulties to secure bank loans (Chin 2003; Moha Asri 2002, 2011; Malaysia 2005b; Malaysia 2012). Studies also reviewed that SMEs in Malaysia lack of technology know-how, little innovation and low level application of ICT (How 2001; MITI 2006: 177-179). Other constraints identified in previous studies include increased competition from economic liberalization and globalization (Tham 2001; Chin 2006), over dependence on limited domestic market rather than overseas markets (Chin 2009), lack of awareness in government incentives (UNDP 2007), and disincentive economic policies and inefficiency of government agencies (Hutchinson 2008; Zwart 2006).

The SME Masterplan recommended six High Impact Programmes (HIPs): Integration of Business Registration and Licensing (HIP1); Technology Commercialisation Platform (HIP2); SME Investment Programme (HIP3); Going Export (GoEx) Programme (HIP4); Catalyst Programme (HIP5); and Inclusive Innovation (HIP6) (Table 5). The Masterplan was launched in July 2012 and started in May 2014. As of 2015, five out of the six HIPs had been rolled out, except HIP 3. For HIP 1, a total of 1,927 licenses have been uploaded to the MalaysiaBiz Portal to ease of doing business through a single gateway for business registration

and licensing. As for HIP 2, a total of 124 license deals were signed and sixty-five intellectual properties have been transferred to the industry for commercialization. HIP 2 had exceeded its initial targets of twenty-three IPs. A total of 361 SMEs had reaped the benefits of HIP 4. However, the impact has yet to be reflected in the performance of SME export. The HIP 5 programme involved a total of 30 SMEs in the BioNext segment with ten SMEs completed the programme to become high growth companies. Finally, the HIP 6 aims at the bottom 40 per cent of the income group had shortlisted twenty-five innovations and reached out to 250 communities. The HIP 6 has six on-going projects namely, Portable Water Filter, Multi-purpose truck, Sopa Dribbling Machine, Micro Hydro, CNC Machine and Paddy Thresher (*SME Annual Report 2015/2016*).

Table 5: High Impact Programmes (HIPs) under the SME Masterplan, 2014-2015

High Impact Programmes		Deals/ Number of SMEs involved	Intellectual Property (IP)	Commercialization of innovations
HIP 1	Integration of Business Registration and Licensing	1,927	-	-
HIP 2	Technology Commercialisation Platform (TCP)	124	65	7
HIP 4	Going Export (GoEx) Programme	361	-	-
HIP 5	Catalyst Programme	30	-	-
HIP 6	Inclusive Innovation	25	-	-

Source: SME Annual Report 2014/2015 and 2015/2016.

Besides plans and initiatives for SMEs development, *ad hoc* programmes were implemented during economic downturns during the 1997-98 Asian Financial Crisis and the recent 2008 Global Financial Crisis. Special funding to SMEs to sustain their operation, to improve productivity, and to facilitate expansion and diversification plans were provided to mitigate SMEs affected by the crisis (Chin 2003; BNM 24 July 2008; EPU 2009).

From the various plans and initiatives mentioned above, it should be noted that the IMP2 and IMP3 provided an integrated approach to the development of SMEs in the industrial sector. The implementation of numerous policies and strategies over the years has enhanced the growth of SMEs. However, due to social responsibility and political interests, efficiency of

implementing SME development policies and initiatives is one important factor, besides external factor that might determine the desired economic performance. The following section provides assessments on SMEs contribution to the Malaysian economy.

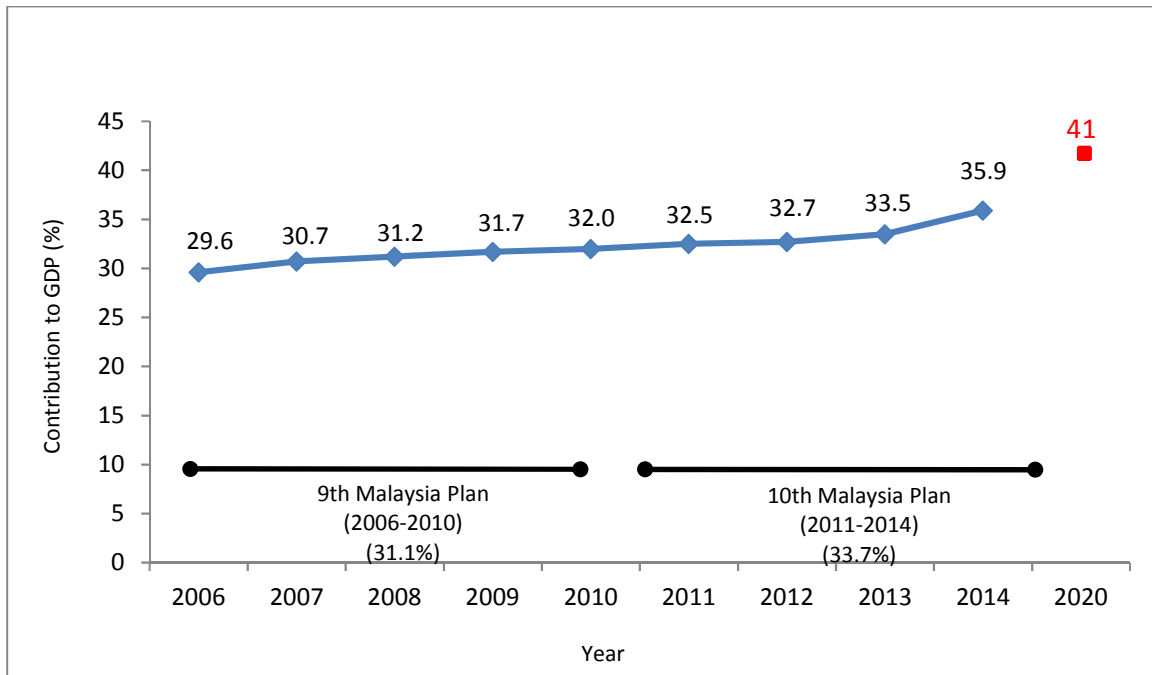
4. Performance of SMEs

In Malaysia, SMEs are the dominant form of business establishments. Out of the 662,939 business establishments, 97.3 per cent are SMEs. More than three quarters of the total SMEs establishments were micro enterprises, followed by 20 per cent small-sized enterprises, and 3 per cent medium-sized enterprises (Malaysia, 2014). Malaysia has fewer medium-sized enterprises, and thus portraying missing middle group. The performance of SMEs is often evaluated by its performance, i.e., by examining its contribution to output and employment, its productivity as well as its performance in innovation activity.

4.1 Output

In terms of output, the contribution of SME GDP to overall GDP has increased from 29.6 per cent in 2006 to 33.1 per cent in 2013 (Figure 1). During the 9MP, the share of SME GDP to overall GDP had increased from 29.6 per cent (2006) to 32.2 per cent (2010), with an average contribution of 31.1 per cent per annum during the 9MP. The contribution of SME GDP to overall GDP continued to increase to 32.5 per cent (2011), 32.7 per cent (2012) and 33.5 per cent (2013) as depicted in Figure 1. On average, the contribution of SME GDP to overall GDP was 33.7 per cent per annum during the first three years of 10MP. In 2014, the contribution of SME GDP to overall GDP has increased by 2.1 per cent to 35.9 per cent. The magnitude of increase in 2014 is far higher as compared to the corresponding figures of 0.2 per cent in 2012 and 0.8 per cent in 2013. The relative high contribution rate in 2014 is partly attributed to the adoption of new definition of SME in that year (Malaysia 2014). On the whole, SMEs contribution to GDP has increased over the years, indicating the increasing importance of SMEs in driving the economic growth of Malaysia. Nevertheless, its achievements in terms of contribution to the overall GDP is still disproportionately low given that almost 97 per cent of business establishments are SMEs.

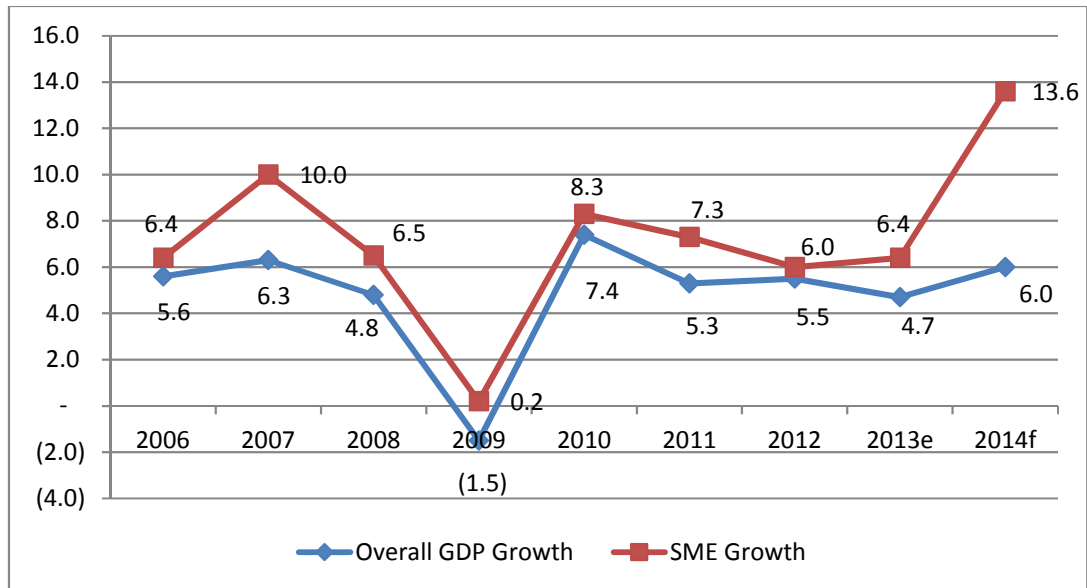
Figure 1: SMEs' Contribution to GDP (Percentage), Malaysia, 2006-2020



Source: Data for 2006-2012 from SME Annual Report 2012/13:20; Data for 2013-2014 from SME Annual Report 2014/15: 121

The trend of the growth of SME GDP was rather similar to that of the growth of overall GDP (Figure 2). Nevertheless, SME GDP grew at faster pace than the overall GDP, as evident from the higher growth rate of SME GDP over overall GDP at all times. SME GDP growth has improved over the years. On the average, the growth rate of SME GDP was 6.2 per cent per annum during the 9MP and has increased to 8.2 per cent per annum during the first four years of 10MP. The growth rate of SME GDP has recorded more than two-fold increases from 6.4 per cent in 2013 to 13.6 per cent in 2014. In addition, the difference between the annual growth of SME GDP and overall GDP also shown a large gap of 7.6 per cent in 2014 as compared to the corresponding figures such as 0.5 per cent (2012) and 1.7 per cent (2013). The sudden increase in differences is partly attributed to the redefinition of SMEs by the Malaysian government which came into effect in 2014. The redefinition exercise has partly contributed to the relatively high annual growth rate during the first four years of 10MP. If the redefinition effect was excluded, the actual annual growth rate of the contribution of SME GDP recorded during the first four year of 10MP would have been much lower i.e. 6.8 per cent per annum.

Figure 2: SME GDP and Overall GDP Growth, Malaysia, 2006-2014
(constant 2010 prices) (annual changes in percentage)



Source: SME Annual report 2014/2015 (Malaysia, 2014).

4.2 Export

In terms of export, the share of SME export to total export recorded an increase of 21 per cent from 2010 to 2015. The average growth rate of share of SME export was 4.2 per cent per annum. During the period of 2013-2015, the average annual growth rate of SME share to total export was recorded at 5.72 per cent, of which is higher as compared to 2.69 per cent per annum recorded during the period of 2010-2013.

Table 6: Share of SME Export to Total Export (2010-2014)

Year	share of SME export to total export (%)
2010	15.7
2011	Na
2012	Na
2013	17.0
2014	Na
2015	19.0
2020 (revised target)	23.0*

Source: Data 2013 obtained from Hafsah (2015). Data from 2010 and 2015 obtained from Exhibit 8-5 in 11th Malaysia Plan (2015: 8-10).

4.3 Employment

In terms of firm size and to put in perspective of employment by firm size, data in Table 7 shows that more workers are employed by SMEs. In 2010, SME has accounted for 53 per cent of the total number of full-time workers in Malaysia, as compared to 47 per cent of large counterparts. The share of SME employment to total employment has been on an increasing trend during the period of 2006-2014. The SME employment share has increased from 56.9 per cent in 2006 to 57.5 per cent in 2013 and 65 per cent in 2014 (Table 8), with an average contribution of 58.6 per cent during the period of 2006-2014. The absolute changes in SME employment share in 2014 was recorded high, i.e. 7.5 per cent as compared to corresponding figures of 0.1 – 2.2 per cent during the period of 2006-2013. This is due to a number of previously classified as “large enterprises” were recategorized as “medium-sized enterprises” following the adoption of new SME definition in 2014.

Table 7: Number of Establishments and Employment by Firm Size, Malaysia (2010)

Indicators	SMEs	Large enterprises	Total
Number of establishments	645,136	17,803	662,939
Employment (persons)	3,669,259	3,294,714	6,963,973
Percentage (%)			
Number of establishments	97.3	2.7	100.0
Employment	52.7	47.3	100.0

Source: Malaysia (2012), Department of Statistics, Economic Census 2011, Profile of Small and Medium Enterprises.

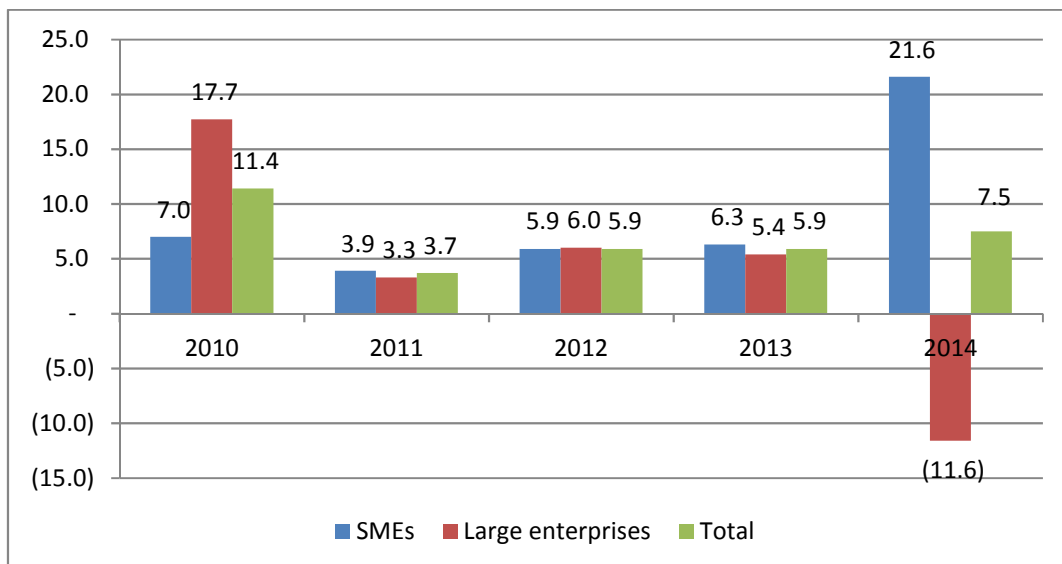
In terms of employment growth, the SME employment continued to expand with a single-digit growth rate (3.9 - 7.0 per cent) during the period of 2010-2013 (Figure 3) and a double-digit positive growth rate (21.6 per cent) was recorded in 2014. In contrast, the large enterprises' employment has registered a negative double-digit employment growth rate (11.6 per cent) in 2014. The double-digit positive growth rate observed among SME employees was partly due to increases in the number of SME employees following the new definition in 2014. This has led to the negative employment growth rate among large enterprises.

Table 8: Share of SME Employment to Total Employment and its annual changes (2005-2014)

Year	Share of SME employment to total employment (%)	Annual changes in SME employment share (%)
2005	56.8	-
2006	56.9	0.1
2007	58.2	1.3
2008	58.9	0.7
2009	59.4	0.5
2010	57.1	-2.3
2011	57.3	0.2
2012	57.2	-0.1
2013	57.5	0.3
2014	65.0	7.5

Source: Adapted from SME Annual Report 2010/2011 and 2014/15. Data for 2005-2009 obtained from SME Annual Report 2010/11: 23. Data for 2011-2014 obtained from SME Annual Report 2014/15: 29.

Figure 3: Employment Growth by Firm Size (%), 2010-2014



Source: Data 2010-2014 obtained from SME Annual Report 2014/15: 29 (Malaysia, 2014).

4.4 Productivity

In terms of productivity, the performance of SME is less satisfactory as compared to that of their large counterparts. Labour productivity appears to be much lower among SMEs as compared to large enterprises during 2003-2012 (Table 9). Visual estimate from the diagram on Malaysia (2014) indicate that the GDP per employee were also lower among SMEs than large enterprises during 2013-2014.⁵ SME labour productivity was approximately one-third that of large enterprises. The labour productivity gap, proxied by the ratio of large enterprise to SME productivity, was fall in between 3.16 and 3.30 during the period of 2003-2009. The gap further narrowed to 2.73 - 2.84 during the period of 2010-2013, indicating improvement of labour productivity among SME over large enterprise. Nevertheless, in 2014, the labour productivity gap was reversed to become larger to 3.22. This is partially due to the increase of number of employees working with SME following the adoption of new definition of SME in similar year.

Table 9: Labour Productivity Gap and Productivity Level (GDP per employee) by Firm Size (Percentage), 2003-2014

Year	Labour Productivity Level (GDP per employee)		Labour Productivity Gap (ratio of large enterprises to SMEs labour productivity)
	SMEs	Large enterprises	
2003	37,195	122,701	3.30
2004	40,717	132,640	3.26
2005	41,037	132,322	3.22
2006	42,919	136,026	3.17
2007	43,584	139,063	3.19
2008	44,442	142,989	3.22
2009	48,694	153,636	3.16
2010	49,266	139,724	2.84
2011	50,730	140,993	2.80
2012	50,550	140,315	2.78
2013	na	Na	2.73
2014	na	Na	3.3

Source: Data 2003-2008 obtained from SME Annual Report 2010/11; data 2009 from SME Annual Report 2011/12; data 2010-2012 from SME Annual Report 2012/13; data 2013-2014 from SME Annual Report 2013/14. . *The numerical number for years (2013-2014) were not reported in SME Annual Report 2014/2015, a visual estimate from the diagrams in page 31 shows that the GDP per employee of SMEs and large firms were between RM50,000 and RM70,000 and between RM200,000-RM250,000, respectively.

⁵ The exact figures for GDP per employee were not published for 2013-2014 in the SME Annual Report 2014/2015.

4.5 Innovation

Since late 1990s, the Malaysian government has carried out various programmes to transform the country into an innovation led economy of which technology and innovation as key drivers of growth. Innovation and technology has been incorporated as one of key aspects in enhancing the competitiveness of SMEs.

As relevant literature on the Malaysian SMEs' innovation performance is limited, the paper relies on the data obtained from the national surveys of innovation published by the Malaysian Science and Technology Information Centre (MASTIC) (1996; 2001; 2003; 2006, 2011; 2014). So far, a total six National Survey of Innovation (NSI) have been carried out by the Ministry of Science, Technology and the Environment. The details on methodology for these NSIs can be obtained from the published reports by MASTIC (1996; 2001; 2003; 2006, 2011; 2014). The extent to which firms engage in innovation was proxied by the incidence of innovation, i.e. the proportion of innovators to the total number of firms. The indicator is computed based on the information obtained from the series of NSIs' published reports published by MASTIC.

Prior to examining the incidence of innovation, it is necessary to have a quick overview on some key aspects of methodology underlying all the national surveys of innovation. With the exception of the first National Survey of Innovation, all national surveys of innovation were formulated based on the recommendations outlined in the Oslo Manual (a document recorded the guidelines on data collection on innovation) with sampling frame drawn from the Department of Statistics Malaysia (DOSM) (Table 10). The methodology for each NSI was described in greater details in MASTIC (2001; 2003; 2006, 2011; 2014). Following this, the analysis is carried out based on the surveys' data from the Second National Survey of Innovation (NSI-2) onwards. The term "NSIs", hereafter, refers to all national surveys of innovation except for First National Survey of Innovation (NSI-1). As illustrated in Table 10, there are some differences observed across the series of NSIs. All NSIs were carried out based on single-stage survey approach with the exception of NSI-2 and Fourth National Surveys of Innovation (NSI-4) of which two-stage survey approach were adopted. In terms of coverage, all NSIs covered a period of three years except for Third National Survey of Innovation (NSI-3) which covered only two years. As for sectors' coverage, earlier NSIs (NSI-2 to NSI-4) covered only the manufacturing sector, and the latest NSIs (Fifth National Survey of Innovation (NSI-5) and Sixth National Survey of Innovation (NSI-6)) have extended the coverage to

include the service sector as well. Hence, it is important to take note of all these differences when comparing innovation indicators across the surveys. Both NSI-5 and NSI-6 were carried out during the 8MP - 10MP of which innovation and technological capability of the SMEs have been emphasized in the development plan especially 9MP and 10MP in view of the increasing competition and the challenges of globalisation.

Table 10: Key Aspect of Methodology of National Surveys of Innovation

	NSI-1	NSI-2	NSI-3	NSI-4	NSI-5	NSI-6
Malaysia Plan		7	7 & 8	8	8 & 9	9 & 10
Reference Period (years of coverage)	1990-1994 (5 years)	1997-1999 (3 years)	2000-2001 (2 years)	2002-2004 (3 years)	2005-2008 (3 years)	2009-2011 (3 years)
Survey Approach	One-stage	Two-stage	One-stage	Two –stage	One-stage	One-stage
Sampling frame drawn from	Non-DOSM	DOSM	DOSM	DOSM	DOSM	DOSM
Sampling frame	815	4000	4000	4000	4000	na*
Responded (manufacturing)		1359 (1st stage)	749	485 (1st stage)	1212	na*
Sector	manufacturing* *	manufacturing	manufacturing	Manufacturing	manufacturing & services	manufacturing & services

Remark: Department of Statistic Malaysia (DOSM). The way of which the analysis is presented in the published report of NSI-5 and NSI-6 was slightly differed from the earlier NSIs' report. *Sampling frame drawn from DOSM is 5,293 of which 1,534 repondents from both manufacturing and services sectors have responded. **89 per cent of sample are from the manufacturing sector and the balance from other sectors.

Table 11 presents the incidence of innovation by firm size.⁶ The comparison across series of NSIs revealed that the incidence of innovation has increased over the years from 19.7 per cent recorded for the period of 1990-1994 (NSI-2) to 60.4 per cent for the period of 2009-2014 (NSI-6). Nevertheless, the extent to which firms engage in innovation has recorded a decrease in the period of 2005-2008 (NSI-5) as compared to the period of 2002-2004 (NSI-4). Perhaps, the relatively high incidence during the priod of 2002-2004 might be partially due to the additional field works to interview the innovating firms as the responses of the Stage 2

⁶ The incidence of innovation could not be obtained for small, medium and large sized enterprises for 2009-2011 as a whole as we were unable to compute based on the published data in the NSI-6's report.

survey in NSI-4 was poor (MASTIC 2006). As shown in Table 11, the incidence of innovation is always lower among small sized firms than medium sized firms, and among medium sized firms than large firms, suggesting smaller firms are less likely to innovate as compared to their larger counterparts. Further scrutinisation of the type of innovation based on the NSI-6 (Table 12) indicates that SMEs are less likely to engage in technological innovation such as product and process innovation than larger counterparts. They are more likely to engage in non-technological innovation such as organizational and marketing innovation. Empirical studies carried out at the firm level in Malaysia provide deeper insights on innovation activity among SMEs. Lee and Lee (2007) using data from NSI-2 and NSI-3 noted that the likelihood to innovate among SMEs is affected not only by firm size, but also other factors such as firm age, export orientation, technological characteristics of industry and market concentration. Lim and Jacqueline (2015) using data from NSI-5 find that the engagement of Malaysia SMEs in in-house R&D is low and the cooperative arrangement with players from foreign countries appear to enhance the likelihood of SMEs to engage in in-house R&D.

Table 11: Incidence of Innovation by Firm Size

Firm Size	Incidence of Innovation (%)				
	<i>NSI-2</i>	<i>NSI-3</i>	<i>NSI-4</i>	<i>NSI-5</i>	<i>NSI-6</i>
	<i>1997-1999</i>	<i>2000-2001</i>	<i>2002-2004</i>	<i>2005-2008</i>	<i>2009-2011</i>
Small	11.2	25.9	32.5	35.8	na
Medium	18.8	51.1	61.0	49.4	na
Large	32.3	52.0	81.8	74.3	na
Total (manufacturing)	19.7	35.1	53.8	51.5	60.4

Source: Own compilation from the reports of NSIs.

Table 12: Innovating Firms by Types of Innovation and Firm Size in Manufacturing Sector (NSI-6)

Firm size	Types of Innovation			
	<i>Product (%)</i>	<i>Process (%)</i>	<i>Organisational (%)</i>	<i>Marketing (%)</i>
Small	24.79	28.36	30.66	41.27
Medium	29.17	32.22	31.39	32.18
Large	40.04	39.48	37.95	26.47

Sources: Own compilation and computation from NSI-6.

In fact, differences in the methodology across series of NSIs, to some extent, has posed difficulties in comparing innovation related indicators across years. In addition, it is worth noting that the impact of 10MP might be too early to be observed in NSI-6 as the reference period of NSI-6 only include one year (2011) of which 10MP was firstly being implemented. Thus, conclusion on the performance of SMEs in innovation activity across years can not be drawn from the above analysis.

5. SMEs by Economic Sectors

In terms of output generation, services sector is of greater importance to SMEs. During the period of 2010-2014, the share of SME GDP in the service sector was always the highest, largely due to high concentration of SMEs in the services sector (see Table 13). Further analysis of the components that made up this sub-sector shows that the wholesale and retail trade plus restaurants and accommodation (WRRRA) contributed 62 percent to this sub-sector in 2015 (Table 14). Value-added of SMEs in the services sector recorded a growth of 8.7 per cent in 2014 versus the overall services sector growth of 6.5per cent. The growth was mainly driven by the largest component namely the WRRRA followed by “other services” sub-sector, namely private education, healthcare and personal services (*SME Annual Report 2014/2015*). This trend of growth in the services sector had gained momentum during the 9MP which is closely related to the rising disposable income together with the changing consumer behaviour and lifestyle and increase in tourism activities (*SME Annual Report 2009/2010*) and from the SME development programmes which resulted in more *Bumiputera* entrepreneurs making

inroads in retail business (*SME Annual Report 2015/2016*). The WRRR component has increased from 59.2 per cent in 2012 to 61.9 per cent in 2015. On the other hand, the transport and storage, and communication component also increased over the same period. Conversely, the finance, insurance, real estate and business component declined from 26.5 per cent in 2012 to 20.4 per cent in 2015 (Table 14). This declining trend is most probably affected by the liberalization of the services sub-sector in 2012.

SMEs in the manufacturing sector has been closely linked to the fluctuation in external demand. The manufacturing sector accounted for 21.7 per cent of the total share of SME GDP to overall GDP (35.9 per cent) in 2014 (Table 13). In total, both services and manufacturing sectors contributed more than 80.5 per cent to the total share of SME GDP to overall GDP.

Table 13: Share of SME GDP and Total GDP by Economic Activity, 2010-2014, Malaysia (at constant 2010 prices)

Economic Activity	2010	2011	2012	2013*	2014**
Services	19.6	19.9	20.0	20.5	21.1
Manufacturing	7.2	7.4	7.4	7.5	7.8
Agriculture	4.3	4.3	4.1	4.0	4.5
Construction	0.9	0.9	1.0	1.1	2.0
Mining & quarrying	0.05	0.05	0.1	0.1	0.1
+ Import duties	0.2	0.3	0.3	0.3	0.4
Share of SME GDP to overall GDP	32.2	32.8	33.0	33.5	35.9

Remark: * estimate, ** preliminary. The shares do not add up to the share of GDP due to undistributed FISIM and import duties. *Source:* obtained from SME Corporation on 16 April 2016.

In terms of the output contribution, the SME GDP contribution to overall GDP (based on the constant 2010 prices) has increased by 3.7 per cent, from 32.2 per cent in 2010 to 35.9 per cent in 2014 (Table 15). The distribution of GDP share by economic activity revealed that the economic structure of SMEs was slightly differed from the overall economy. The contribution of SME GDP to total GDP in sectors such as services, agriculture and construction, were 5.1 per cent, 3.2 per cent and 1.4 per cent, respectively, higher than the corresponding share of total GDP (Table 16). In contrast, the share of SME GDP (as a percentage of total SME GDP) in mining and quarrying, and manufacturing sectors were -8.6 per cent and -1.3 per cent, respectively, lower than the corresponding share to total GDP.

Table 14: Components of Value-added of SMEs in the Services Sector (Percentage), 2012-15

Components	Year			
	2012	2013	2014	2015
Finance, insurance, real estate and business (FIRB)	26.5	21.5	20.6	20.4
Wholesale and retail trade & restaurants and accommodation (WRRRA)	59.6	59.8	61.6	61.9
Transport & storage and communication (TSC)	6.2	11.7	10.4	10.3
Other services	7.7	7.0	7.7	7.4
Total	100	100	100	100

Source: SME Annual Report 2009/2010, 2014/2015, 2015/2016

**Table 15: SME GDP Growth by Economic Activity, Malaysia
(annual changes in percentage and constant 2010 prices)**

Sector	SME Contribution to GDP (%)		
	2010 (% share)	2014 (% share)	changes in share (2010 vs 2014)
Services	19.6	21.1	+1.5
Manufacturing	7.2	7.8	+0.6
Agriculture	4.3	4.5	+0.2
Construction	0.9	2.0	+1.1
Mining & quarrying	0.0	0.1	+0.1
Overall²	32.2	35.9	+3.7

Source: SME Annual Report 2014/2015: 19.

¹ CAGR refers to compounded annual growth rate. ² Total value-added after taking into account import duties.

Table 17 presents the distribution of establishments by economic activity. The economic structure of SMEs differs from that of large enterprises. In terms of the number of establishment, a great majority of SMEs focused in a single sector. In 2010, more than 90 per cent of SME business establishments focused in services sector. Large enterprises tend to spread across various sectors such as services (61 per cent), construction (16 per cent), agricultural (12 per cent) and manufacturing (10 per cent). Further examination of the economic structure across SMEs revealed that the proportion of SME establishments engaging in services sector tend to be higher among micro enterprises (93.1 per cent) and small sized enterprises (82.3 per cent) than medium sized enterprises (63.8 per cent), suggesting that micro

and small enterprises tend to engage in service sector. The reverse was observed in manufacturing and construction sectors of which medium sized enterprises show a greater intensity to engage in these sectors than small and micro enterprises. In addition, the proportion of total number of establishments engaging in services and manufacturing sectors did not differ much between medium and large enterprises.

**Table 16: Share of SME GDP and Total GDP by Economic Sectors in 2014, Malaysia
(At constant 2010 prices)**

Sector	SME GDP (%)	Total GDP (%)	Difference
Agriculture	12.4	9.2	+3.2
Mining & quarrying	0.4	9.0	-8.6
Construction	5.7	4.3	+1.4
Manufacturing	21.7	23.0	-1.3
Services	58.6	53.5	+5.1
+ Import duties	1.1	1.1	0.0
Total	100	100	

Source: SME Annual Report 2014/2015: 22.

**Table 17: Distribution of Number of SME Establishments (reference year 2010)
by Economic Sectors**

Sector	The number of establishments (as % to total number of establishments)					Total
	Micro (%)	Small (%)	Medium (%)	SMEs (%)	Large (%)	
Services	93.14	82.35	62.86	90.06	61.21	89.3
Construction	1.73	5.22	19.96	2.99	16.05	3.3
Manufacturing	4.35	10.82	11.60	5.87	10.16	6.0
Agriculture	0.76	1.51	4.99	1.04	11.91	1.3
Mining & quarrying	0.01	0.10	0.58	0.05	0.67	0.1
Number of establishments	496,458	128,787	19,891	645,136	17,803	662,939

Source: recompiled from Table 1 in SME Annual Report 2014/15: 120.

**Table 18: SME GDP Gross Output and Value Added
by Economic Sectors, Malaysia, 2010**

Sector	Gross Output (RM million)			Value added (RM million)		
	Micro	Small	Medium	Micro	Small	Medium
Agriculture	769	1871	2554	343	937	1385
Mining & quarrying	39	302	764	13	95	271
Construction	1,219	6,001	12,898	545	2,227	4,764
Manufacturing	3,853	59,540	130,639	1,344	14,348	22,366
Services	87,701	131,145	67,795	52,285	76,460	36,537
Total	93,581	198,859	214,650	54,530	94,067	65,323
	Percentage					
Agriculture	0.82	0.94	1.19	0.63	1.00	2.12
Mining & quarrying	0.04	0.15	0.36	0.02	0.10	0.41
Construction	1.30	3.02	6.01	1.00	2.37	7.29
Manufacturing	4.12	29.94	60.86	2.46	15.25	34.24
Services	93.72	65.95	31.58	95.88	81.28	55.93
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: Malaysia (2012), Department of Statistics, Economic Census 2011, Profile of Small and Medium Enterprises.

Deeper analysis of the gross output and value added of each sub-category of the SMEs (Table 18) showed that the small sized enterprises in the services sector contribute the highest gross output (RM131,145 million) followed by the micro sized enterprises (RM87,701) and then the medium sized enterprises (RM67,795 million). However, SMEs in the manufacturing sector has a different structure. Medium sized enterprises contribute the highest gross output (RM130,639 million) followed by the small sized enterprises (RM59,540 million) and the micro sized enterprises (RM3,853 million). SMEs in the other sectors such as the agriculture; mining and quarrying; and construction share the same structure as the manufacturing in terms of gross output and as well as value added.

6. The Impact of New Definition of SME on Certain Economics Indicators

The revised definition of SME in 2014 has affected certain economic indicators. Following the redefinition of SME, the numbers of SME establishments have increased. The adoption of new official SME definition in 2014 has led to approximately 8,000 additional firms which were previously classified as large firms were now categorized as SMEs (Malaysia 2014). Based on

the Economic Census 2011 - Profile of Small and Medium Enterprise (Malaysia 2012), the adoption of the new definition of SME has resulted the ratio of the number of SME establishments to total business establishments in Malaysia has increased to 98.5 per cent in 2014 compared with 97.3 per cent in 2010. This increases the number of SME establishments eligible for government assistance.

In terms of employment, the adoption of new SME definition has resulted in additional increase of 1.1 million full-time workers joining the SME labor market. The number of full-time workers employed by SMEs has increased by 1.1 million, from 5.1 million (under old definition) to 6.2 million (under new definition) in 2014 (Malaysia, 2014). In fact, the estimates of 6.2 million could be further broke down into two parts. The first part is 5.08 million (82 per cent of 6.2 million) which represents the total number of full-time workers employed by the existing SMEs that were SMEs before the new SME definition. The second part comprises of 1.12 million (18per cent of 6.2 million) which represents the number of full-time workers which were previously worked with large establishments (under the old definition) that have been categorized as SME under the new definition. Approximately 51 per cent of the additional numbers of employees come from the services sector (561,000 employees) while 30 per cent were construction (329,000 employees) sector (Malaysia, 2014). The increase in the number of employees in the construction sector has also led to a high growth rate of SME GDP in this sector in 2014. However, similar scenario was not observed in the services sector. Even though more than half of the additional numbers of employees was from services sectors, the SME GDP in the services sector did not record much change in 2014. The redefinition has also affected the employment growth of SMEs and large enterprises. The number of full-time workers employed by SME has recorded a double digit growth of 21.6 per cent in 2014 as compared to single-digit growth rate ranging between 3.9 - 6.3 per cent during the period of 2010-2013. In addition, for the first time since 2010, the employment growth rate of large enterprises has recorded a negative growth rate (-11.6per cent) in 2014 (see Figure 5).

Last but not least, the redefinition has also affected the productivity gap between SMEs and large enterprises. The labor productivity gap between SMEs and large enterprises has been widened. As shown in Table 9, the labor productivity for SMEs in 2010 and 2013 was 2.84 times and 2.73 times, respectively, lower than those for large enterprises. But, the difference in the labor productivity between SMEs and large firms has increased to 3.3 times in 2014. This is mainly attributed to the one-off increase in the number of workers employed by SME sector following the redefinition in 2014. This also implies that many of reclassified establishments

[from large enterprises (under old definition) to medium sized enterprises (under the new definition) were labor-intensive establishments (Malaysia 2014).

7. Malaysian SMEs in Perspective

This section reviews the achievement of Malaysian SMEs with respect to their counterparts in selected countries. It is not easy to obtain estimates of SME contribution with respect to performance indicators such as value added or output, export, and even more difficult to make comparison by country. In addition, the definition of SME varies by country, and thus resulting lack of a standardized definition of SMEs (ADB 2013). Following this, SMEs refer to the national definition of SME adopted by the country.

The extent to which SME contribute to the economy varies by country. As shown in Table 19, the share of SME to total GDP ranged between 17 per cent (India) and 53.8 per cent (Germany). The contribution of SME to GDP in Malaysia is approximately 32 per cent. This was obviously lower than those of high income countries such as Germany (53.8 per cent), Singapore (50 per cent), Japan (50 per cent), Republic of Korea (49 per cent), and those of upper-middle income countries such as Republic of China (59 per cent) and Thailand (38 per cent). Comparing with lower-middle income countries revealed that Malaysia's SME share to GDP was lower than countries such as Philippines (35.7 per cent), Vietnam (40 per cent), Sri Lanka (52 per cent), while higher than countries such as India (17 per cent) and Pakistan (30 per cent). This indicates that the contribution of Malaysian SME to economy is still small as compared to those of high and upper-middle income countries.

In terms of employment, the share of SME to total work force ranged between 35 per cent (Sri Lanka) and 97.2 per cent (Indonesia). The number of workers employed by SMEs in Malaysia (58.9 per cent) was generally lower than high-income and upper-middle income countries. Among lower-middle income countries with the exceptional for India (40 per cent) and Sri Lanka (35 per cent), Malaysian SMEs share to total work force was generally lower relatively.

Table 19: SMEs' Contribution to Economic Activity and Trade

Country	Income-level ¹	SME share to GDP/value added (%)	SME share of total employment (%)	SME share of total exports (%)
Germany ¹	High	53.8	79.0	55.9
Japan ¹	High	50.0	70.2	53.8
Republic of Korea ¹	High	49.4	87.5	30.9
Singapore (2014) ^{4,5}	High	46 ²	66	20
Republic of China (2011) ⁵	Upper-middle	59	80	68
Thailand ¹	Upper-middle	38.7	77.9	29.5
Malaysia (2013)	Upper-middle	31.9	58.9	19.0
Vietnam ¹	Lower-middle	40.0	77.0	20.0
Indonesia ¹	Lower-middle	57.8	97.2	15.8
The Philippines ¹	Lower-middle	35.7	61.0	20.0
Sri Lanka ^{1,*}	Lower-middle	52.0	35.0	20.0
Pakistan ¹	Lower-middle	30.0	70.0	25.0
India ¹	Lower-middle	17.0	40.0	40.0
Bangladesh ¹	Low	22.5	40.0	11.3

Source: *estimate based on most recently available data. ¹ obtained from the website of World Bank; ³Naoyuki Yoshino and Ganeshan Wignaraja (2015); ⁴Singapore (2016); ⁵OECD (2013).

In terms of trade, the SME share of exports ranged between 11 per cent (Bangladesh) and 56 per cent (Germany). The SME share to exports in Malaysia was only 19 per cent, suggesting that Malaysian SMEs are largely domestic market oriented. The share is much lower as compared with those of other high-income countries such as Germany (55.9 per cent), Japan (53.8 per cent) and upper-middle income countries such as Thailand (29.5 per cent), People's Republic of China (68 per cent). It was also lower than those of some lower-middle income countries such as India (40 per cent), Pakistan (25 per cent), Vietnam (20 per cent), the Philippines (20 per cent), and higher than Indonesia (15.8 per cent).

8. Will the 11th Malaysia Plan Targets for SMEs be Achieved?

Based on our assessment of development policies for SMEs and SME performances over time, we give our view on whether Malaysia will be able to achieve its targetted plan for SMEs as laid out in the 11MP and the SME Masterplan.

8.1 GDP

Table 20 displays the performance target by the government and the possibility of achieving the target ratios for SME. With respect to the share of SME GDP, the government aims to achieve the ratio of 41 per cent by 2020, as listed in the SME Master Plan and SME Annual Report 2014/15. The ratio has been revised to 38.4 per cent in the 11MP.

Table 20: Key Performance Target and The Possibility of Achieving the Targets for SMEs, Malaysia

Item	SME Master Plan (2012)*	SME Annual Report 2014/15 (2014)*	11 th MP Target (2015)*	Possibility of achieving (target in SME Annual Report 2014/15)	Possibility of achieving (target in 11 th MP target)
Share of SME GDP to overall GDP (%)	41.0	41.0	38.4	Uncertain	Possible to achieve
Share of SME export to total exports (%)	25.0	23.0	22.4	Possible to achieve	Possible to achieve
Share of SME employment to total employments (%)	62.0	65.0	60.7	Achieved	Achieved

Source: 11th Malaysia Plan (2016-2020); SME Annual Report 2014/15. *year of publication.

In order to review the possibility of achieving the target ratio by 2020, four projection scenarios have been considered, as summarised in Table 21. First scenario projected SME GDP contribution based on the 2006-13 historical compounded annual growth rate of 1.78 per cent (old SME definition) for the period of 2014-20. Based on this historical growth rate, it is rather challenging to achieve the target ratio, i.e. 41 per cent by 2020 based on the old definition of SMEs (as shown in Figure 4).

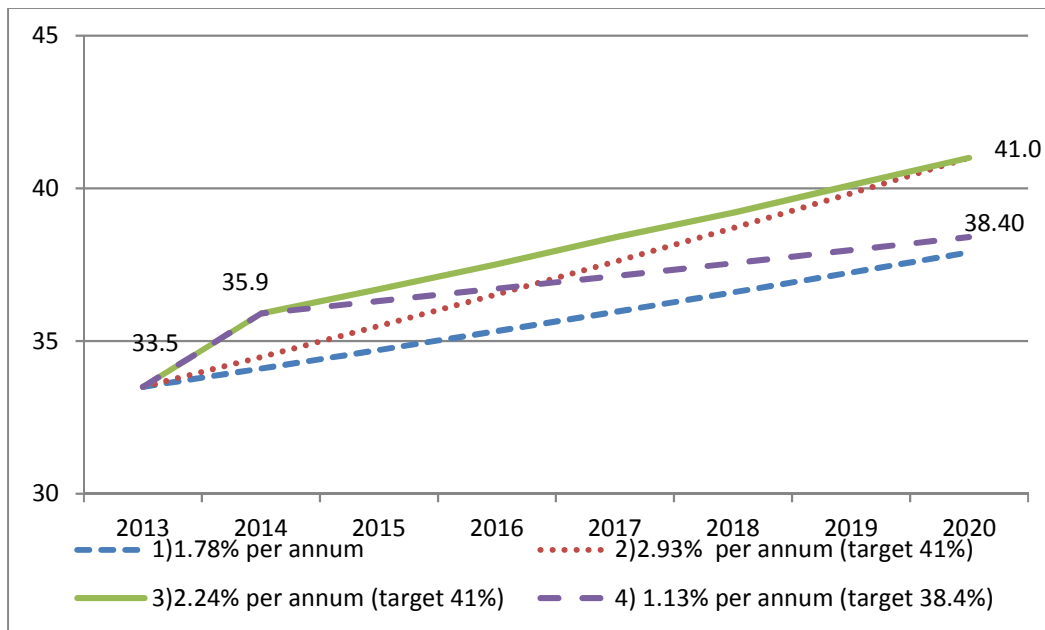
Second scenario projected SME GDP contribution based on the 2006-13 historical compounded annual growth rate (old SME definition) to achieve the target ratio by 2020 for the period of 2014-20. To achieve the target ratio of 41 per cent by 2020, the contribution of SME output to overall GDP would have to grow at approximately 2.93 per cent per annum during the period 2014-20 (as shown in Figure 4). In other words, the existing growth rate has to be accelerated by at least 1.65 times. Based on the projection of both scenarios, it is rather challenging to achieve the targeted shares of SME GDP, i.e. 41 per cent as set in the SME Masterplan.

Table 21: Projection Scenarios for SME Share to GDP

Scenario	Projection Period	SME definition	SME share to GDP (Target)	Historical compounded growth rate	Required compounded growth rate
1.	2014-2020	old	-	1.78% (2006-2013)	-
2	2014-2020	old	41.0%	-	2.93%
3	2015-2020	new	41.0%	-	2.24%
4	2015-2020	new	38.4%	-	1.13%

The third scenario projected SME GDP contribution based on the 2006-2013 historical compounded annual growth rate after the adoption of new SME definition to achieve the targeted ratio by 2020 for the period of 2015-20. As compared to second scenario, the required growth rate in this scenario is much lower. To achieve the target ratio of 41 per cent by 2020, SME contribution to overall GDP would have to grow at 2.24 per cent per annum during the period of over the balance of 6 years (2015-2020) (as shown in Figure 4), suggesting that the existing growth rate has to be accelerated by at least 1.25 times. However, given that the number of SME establishments has increased following the adoption of new SME definition in 2014, there is possibility that the existing growth rate could reach the target annual growth rate of 2.24 per cent even though it is higher than the historical annual growth rate of 1.78per cent.

Figure 4: Projection of SME Share to GDP (%), 2014-2020



The last scenario projected SME GDP contribution to achieve the target ratio listed in 11MP by 2020 for the period of 2015-20. To achieve this target ratio by 2020, SME contribution to overall GDP would have to grow at 1.13 per cent per annum during the period of 2015-20 (as shown in Figure 4). As the projected growth rate was much lower than the existing historical compounded growth rate of 1.78 per cent recorded in 2006-2013, there is possibility to achieve the target ratio of 38.4 per cent in 11MP by 2020. Hence, with the revision of the target ratio and the redefinition of SME, the target contribution of SMEs to GDP of 38.4 per cent can most probably be achieved by 2020 (Table 21). However, these projections are also subjected to global economic growth, as well as overall GDP growth because the SME GDP always grows in tandem to overall GDP growth as shown in Figure 2.

8.2 Export

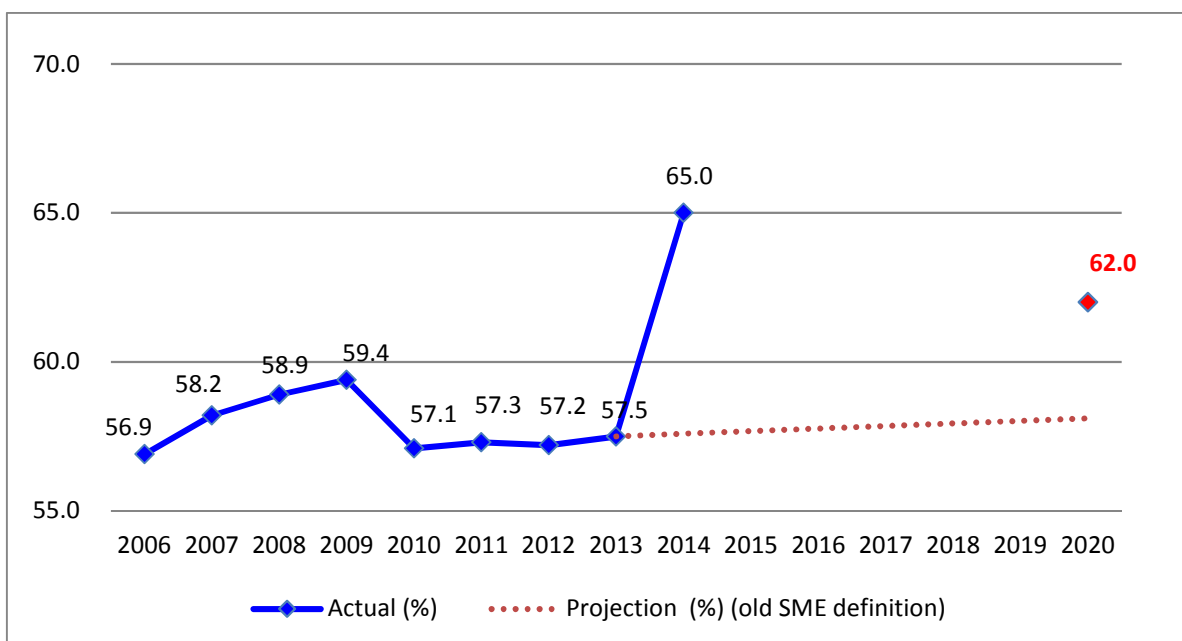
The government aims to increase share of SME export to total export to 25 per cent as set in the SME Masterplan. Subsequently, the SME export share was further revised to 23 per cent and 22.4 per cent in SME Annual Report 2014/15 and 11MP, respectively. To achieve the revised target ratio of 23 per cent by 2020, the SME share to total export has to grow at 3.90 per cent per annum during the period 2016-20. This projected growth rate was much lower than the historical compounded growth rate of 5.72 per cent per annum (2013-15). Hence, the

revised target SME export share of 23 per cent or 22.4 per cent can be achieved by 2020 following the adoption of new SME definition and the downward revision of the target of SME export share.

8.3 Employment

With respect to SME employment share, the target ratio was 62 per cent as set in SME Masterplan. Revisions have been made in the subsequent report, i.e. SME Annual Report 2014/15 and 11MP (Table 20). Figure 5 portrays projection on the SME employment share beginning 2014 onwards based on the 2006-13 historical compounded annual growth rate of 0.15 per cent (under old SME definition). As shown, it is impossible to achieve the target SME employment share of 62per cent by 2020 based on the old definition of SME. To achieve the target ratio of 65 per cent by 2020, share of SME employment to overall GDP would have to grow at 1.77 per cent per annum during the period of 2014-20 (Figure 5). The growth rate is much higher than the existing historical compounded growth rate during the period 2006-13. However, following the SME redefinition exercise, the SME employment share (65 per cent) in 2014 exceeds the target of 62 per cent set in the SME Masterplan and is equivalent to the revised target ratio of 65 per cent listed in the SME Annual Report 2014/15 (Malaysia, 2014).

Figure 5: Projection of SME Employment Share to Total Employment (%), 2014-2020



9. Conclusion

Since the year 2004, a “comprehensive” ecosystem to support the development of SMEs has been developed and later expanded and refined in the SME Masterplan. From the 10MP, there is a continuity of policy focus for SME development in the 11MP which looks into the liberalization and deregulation of the Malaysian economy. The focus of creating domestic, regional and global champions since the 10MP continues in the 11MP but with specific focus to provide supports to internationalize targeted exporters by leveraging on smart partnership between SMEs and MNCs, and GLCs as well. This is a right focus and right strategy to address the low contribution of SMEs share to total export of only 19 per cent recorded in 2015. This figure is only 1 per cent lower than SMEs contribution to total export in Singapore, an advance country. For Malaysia to increase SMEs share to total export of 25 per cent in the next five years is rather ambitious and challenging. The SME development programmes under the 10MP did not address well to increase the capacity and capability of export for SMEs. Following the development of global economic growth, the SME export target had been revised to 22.4 per cent in 2014. From the analysis of firm size, specific support should be given to medium sized firms (especially manufacturing) that have proven their performance and have great potential to successfully venture into frontier products. It is argue here again that allocation of resources with political interest to majority *Bumiputera*-owned micro and small firms that mainly represent the services sector would affect the performance of manufacturing and export sector which invovled mostly medium sized enterprises.

In terms of SME contribution to total employment, it had over-achieved the target goal due to the redefinition of SMEs. Overall, based on the average SME GDP growth rates recorded in the 9MP and 10MP, it would be rather challenging to meet the goals for SMEs by 2020. However, with the redefinition of SMEs and a new SME development framework outlined in the SME Masterplan, it may require much more talents, more consistency, efficiency and speed to implement policies and programmes to accelerate growth for SMEs. As for the performance of SMEs in innovation activity, no conclusion could actually be drawn from the analysis due to the difficulty encountered in comparing series of NSIs with different methodology. Moreover, it is also too early to observe the impact of 10th MP in NSI-6 which only covered one year (2011) of which 10MP was firstly being implemented. However, the creation of specialized agencies to drive innovation programmes and intermediaries to enhance collaboration for SMEs had been achieved.

SMEs in the construction sector are highlighted to receive help to bid for international projects even though its contribution to total GDP is the lowest compared to manufacturing, services, and agriculture, except for mining and quarrying. In fact, the construction sector has a cyclical nature which means that growth in this sector is difficult to sustain. As discussed above, we view the development of SMEs in the construction sector as closely related to the continuous spirit of affirmative action to focus on developing *Bumiputera* interest in the construction sector which is inline with the government's economic transformation programme for *Bumiputera* firms to leverage on the advantage of the development plan for the Greater Kuala Lumpur⁷, the subway project in the Klang Valley, the Kuala Lumpur-Singapore high-speed line and the Pan Borneo Highway project in Sarawak and Sabah are among the few largest projects.⁸

The SME Masterplan has identified the forces (six) that drive SME performance. In fact, these forces are constraints that SMEs face as identified in previous studies. This means that by addressing these constraints successfully with the implementation of the six high impact programmes under the Masterplan, SMEs will be able to perform well. The 10MP had successfully created more microenterprises as evident in the increased household income of the B40 by about 76 per cent. The challenge to achieve in other aspects of the SMEs under the 11MP lies with the implementation which is embedded with socio-economic and political interests and could delay or constraint the desired performance of Malaysian SMEs.

⁷ Greater Kuala Lumpur is one of 12 National Key Economic Areas outlined in the Economic Transformation Programme (ETP) that has enormous property development prospect.

⁸ Bloomberg estimated the value of building jobs in Malaysia to be around USD51 billion. See <<<http://www.bloomberg.com/news/articles/2016-04-27/-51-billion-bonanza-makes-malaysian-builders-winners-to-top-fund>>>

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